

IN THE CLAIMS:

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Cancel Claims 1 to 5.

6. (NEW) An audio reproducing device comprising:

- an input for receiving a  $k$ -channel input signal,
- an audio processing unit for processing the input signal, and
- an output for supplying an  $l$ -channel output signal to  $l$  loudspeakers,

wherein the audio processing unit comprises enhancing means with a  $\tanh(x)$  transfer function

7. (NEW) An audio reproducing device comprising:

- a'*
- an input for receiving a multi-channel input audio signal,
  - a splitter for splitting the multi-channel input audio signal into  $n$  output signal parts,
  - an enhancer for enhancing  $m$  channel signal parts,
  - a combiner for combining  $m$  enhanced signal parts from the enhancer and  $n-m$  signal parts from the splitter, and
  - an output for supplying an  $l$ -channel output signal to  $l$  loudspeakers.

8. (NEW) The audio reproducing device of Claim 7, wherein the enhancer has a monotone transfer function.

9. (NEW) The audio reproducing device of Claim 8, wherein the enhancer comprises a non-linear device with a monotone transfer function.

10. (NEW) The audio reproducing device of Claim 8, wherein the monotone transfer function is anti-symmetrical.

11. (NEW) The audio reproducing device of Claim 7, wherein the enhancer has a  $\tanh(x)$  transfer function.

12. (NEW) The audio reproducing device of Claim 7, wherein the enhancer has a transfer function with a monotone decreasing slope.

13. (NEW) The audio reproducing device of Claim 7, which comprises a pre-processing unit for the multi-channel input signal.

14. (NEW) A method of reproducing an audio signal, which comprises the steps of:

(a) processing a multi-channel input audio signal to generate  $n$  channel signal parts;

(b) enhancing  $m$  channel signal parts in an enhancer;

(c) combining  $m$  channel signal parts from the enhancer with  $n-m$  channel signal parts from step (b); and

(d) generating an  $l$ -channel output signal.

15. (NEW) The method of Claim 14, wherein the enhancer has a transfer function with a monotone decreasing slope.

16. (NEW) The method of Claim 15, wherein the transfer function is  $\tanh(x)$ .